Abstract of the Disclosure

An optical waveguide comprising at least a guiding lamina (10) of optical

material bonded by direct interfacial bonding to a superstructure lamina (20) of optical material, in which regions of the guiding lamina have modified optical properties so as to define a light guiding path along the guiding lamina. In a particular example, a periodically poled LiNbO₃ planar waveguide is buried in LiTaO₃ by direct interfacial bonding and precision polishing techniques and used

in an optical frequency doubling system.